



DEPARTMENT OF DEFENSE

Department of the Air Force

[AIT-231220A-SL]

Notice of Availability of Software and Documentation for Licensing

AGENCY: Department of the Air Force, Department of Defense.

ACTION: Availability of WIFI Distinct Native Attribute (DNA) Fingerprinting Demonstration Code.

SUMMARY: Pursuant to the provisions of section 801 of Public Law 113-66 (2014 National Defense Authorization Act); the Department of the Air Force announces the availability of WIFI Distinct Native Attribute (DNA) Fingerprinting Demonstration Code, V23, dated 15 Nov 2023, to include source code (MATLAB m-files), experimentally collected WIFI data (MATLAB mat-files), and operation checking (Ops Check) documentation software and related documentation for to illustrate some basic elements of Distinct Native Attribute (DNA) fingerprinting. DNA fingerprints are extracted from radio frequency device emissions and used to discriminate (uniquely identify) specific hardware devices using machine learning (ML) techniques. The demonstrated discriminability is akin to using human fingerprints and/or human DNA to discriminate (identify) individuals. The package includes a series of folders and code for performing end-to-end DNA fingerprinting. The folders are sequentially numbered and include some experimentally collected WiFi signals; some 1D and 2D fingerprint extraction / generation code, and some machine learning code for performing the discrimination. All of the code includes header information indicating contributing researchers and appropriate references for signals and systems where the DNA fingerprinting has been demonstrated.

ADDRESSES: Licensing interests should be sent to AFIT ORTA, 2950 Hobson Way, Wright-Patterson AFB, OH 45433; 937-255-3633; or E-mail: AFIT.CZ.ORTA@us.af.mil. Include Docket No. AIT-231220-SL in the subject line of the message.

FOR FURTHER INFORMATION CONTACT: AFIT ORTA, 2950 Hobson Way, Wright-Patterson AFB, OH 45433; 937-255-3633; or E-mail: AFIT.CZ.ORTA@us.af.mil.

SUPPLEMENTARY INFORMATION: None.

AUTHORITY: Section 801 of Public Law 113-66 (2014 National Defense Authorization Act).

Tommy W. Lee,

Acting Air Force Federal Register Liaison Officer.

[FR Doc. 2023-28624 Filed: 12/27/2023 8:45 am; Publication Date: 12/28/2023]